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## THE DIRECTOR OF CENTRAL INTELLIGENCE

WASHINGTON, D.C. 20505

National Intelligence Council

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MEMORANDUM FOR: Chairman, National Intelligence Council

FROM : Hans Heymann, Jr.  
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SUBJECT : The Controversy over "Soviet Defense Spending"

Summary: DDI/SOVA's long-standing effort to cost Soviet defense activities has produced an important new insight: that there has been a significant slowdown in Soviet military procurement in the 1975-81 period. The methodology used includes the valuation of Soviet defense activities in dollar and ruble terms. Under present circumstances, however, of an apparent shift in the Soviet defense cost structure, the methodology yields the misleading conclusion that the slowdown in procurement has meant a slowdown in defense spending--which, in turn, invites a needless political brouhaha. The costing methodology we use does not provide the basis for a reliable conclusion on Soviet defense spending. In presenting our findings, we would be well-advised to abandon that concept and to characterize what we are reflecting as "the ruble value of Soviet defense activities," with a strong disclaimer that this aggregating device reflects real Soviet resource costs.

1. Background. It has been the DDI's practice for many years to produce two studies almost every year on the "cost" of Soviet defense activities:

- o One, in constant US dollar terms, is intended to enable us to compare the size or volume of Soviet defense activities with those of the US.
- o The other, in constant ruble terms, is intended to reveal, as best we can, trends in the real resource cost of Soviet defense activities over time.

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2. The methodology involved is tortured and has always been vulnerable to all manner of criticism--but it's the only one we've got, and we have been under persistent pressure to produce both kinds of estimates. The methodology for both studies is essentially the same:

- o Soviet forces and defense activities are identified in great detail in physical terms and are then costed in prevailing US dollar prices and wage rates using a complex model and carefully developed cost estimating relationships.

[redacted] The results are then aggregated and are compared with US defense outlays derived from the FYDP and the US budget.

- o For the purpose of the ruble calculation, an additional step is taken to convert the dollar costs into constant 1970 rubles by use of ruble-dollar price ratios for various defense activities (except military personnel costs which are computed in rubles directly, and RDT&E which is estimated from Soviet budetary sources). It is hoped, in this way, to reflect real Soviet resource costs of the defense effort.

3. But there's the rub. Because of our limited understanding of the ruble price structure and the paucity of reliable ruble prices in the Soviet defense sector, the ruble-dollar ratios have always been a thin reed, at best, in reflecting relative resource costs in the two economies. In the past, trends in Soviet defense activities have been fairly stable (i.e., rising at a rather constant rate) and we felt that the ruble valuation, with all its problems, probably reflected the large, aggregate trends reasonably well. Now, however, we are faced with a major discontinuity in the trends, and it raises serious problems for the methodology. Specifically, all the signs suggest that there has been a significant shift in the Soviet cost structure, at least in the important procurement area--a shift that our methodology simply will not pick up. The problem is, at least in part, occasioned by the fact that Soviet weapons designers have in recent years largely abandoned their traditional practice of making small, incremental design improvements in tried and proven weapon systems, and have instead imitated the US penchant for "great leaps" in technological complexity.

4. More concretely, SOVA's analysis marshalls persuasive evidence that in the past five years there has been a significant slowdown in the rate at which Soviet defense industry has been able to deliver the complex

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new weapons systems to Soviet forces. It identifies the reasons for the slowdown as being, among others, technical difficulties in mastering sophisticated new technology and major bottlenecks in raw material and energy supply and in transportation--problems that have, in recent years, plagued all of Soviet industry. In the West, such difficulties and bottlenecks would show up as cost overruns. There is every reason to assume that they also do so in the Soviet Union--but our costing methodology does not pick up this phenomenon because it simply costs the reduced flow that comes off the production line, using cost estimating relationships and ruble-dollar ratios that do not reflect the potentially very large incremental costs of design flaws, faulty and interrupted production, underutilized labor and other costs that remain fixed regardless of the scale of output.

5. My point is that our methodology leads us to the almost certainly erroneous conclusion that the slowdown in major procurement flows (which we observe physically) has meant a slowdown in defense spending. It is important that we not fall into this trap. While I can't prove it or quantify it, the logic of the situation is that, far from having spent less, the Soviets had to spend a lot more for the reduced flow of output they were able to achieve. Because of these uncertainties, I would urge that, in presenting the important findings on the procurement slowdown, we avoid drawing any conclusions about Soviet "defense spending." If we must use the ruble valuation data as an aggregating device, we might simply refer to it as the "ruble value of Soviet defense activities," making it very clear that these valuations are not intended to reflect real Soviet resource costs.



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